FIG. 1

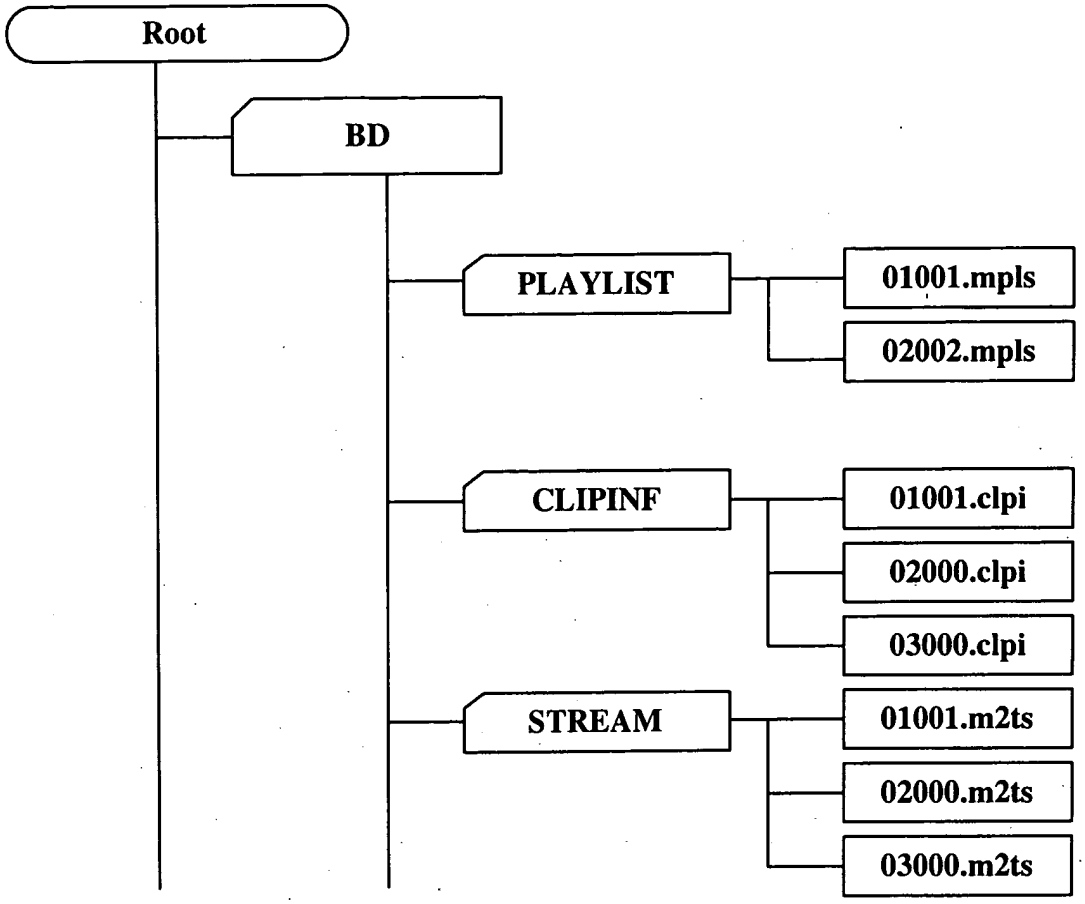

Root
BD
PLAYLIST
01001.mpls
02002.mpls
CLIPINF
01001.clpi
02000.clpi
03000.clpi
STREAM
01001.m2ts
02000.m2ts
03000.m2ts

FIG. 2

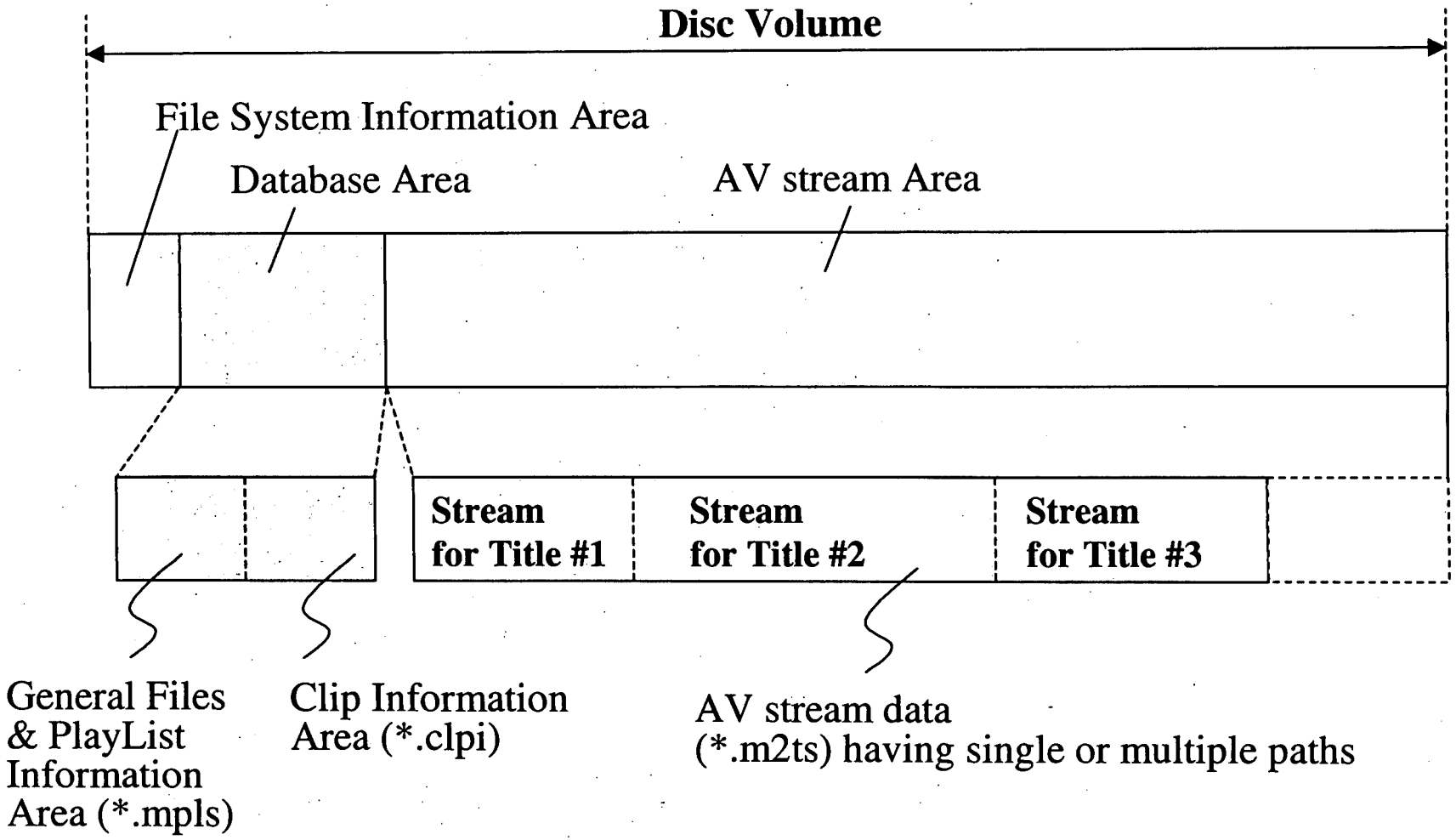

Disc Volume
File System Information Area
Database Area
AV stream Area
Stream for Title #1
Stream for Title #2
Stream for Title #3
General Files & PlayList Information Area (*.mpls)
Clip Information Area (*.clpi)
AV stream data (*.m2ts) having single or multiple paths

FIG. 3

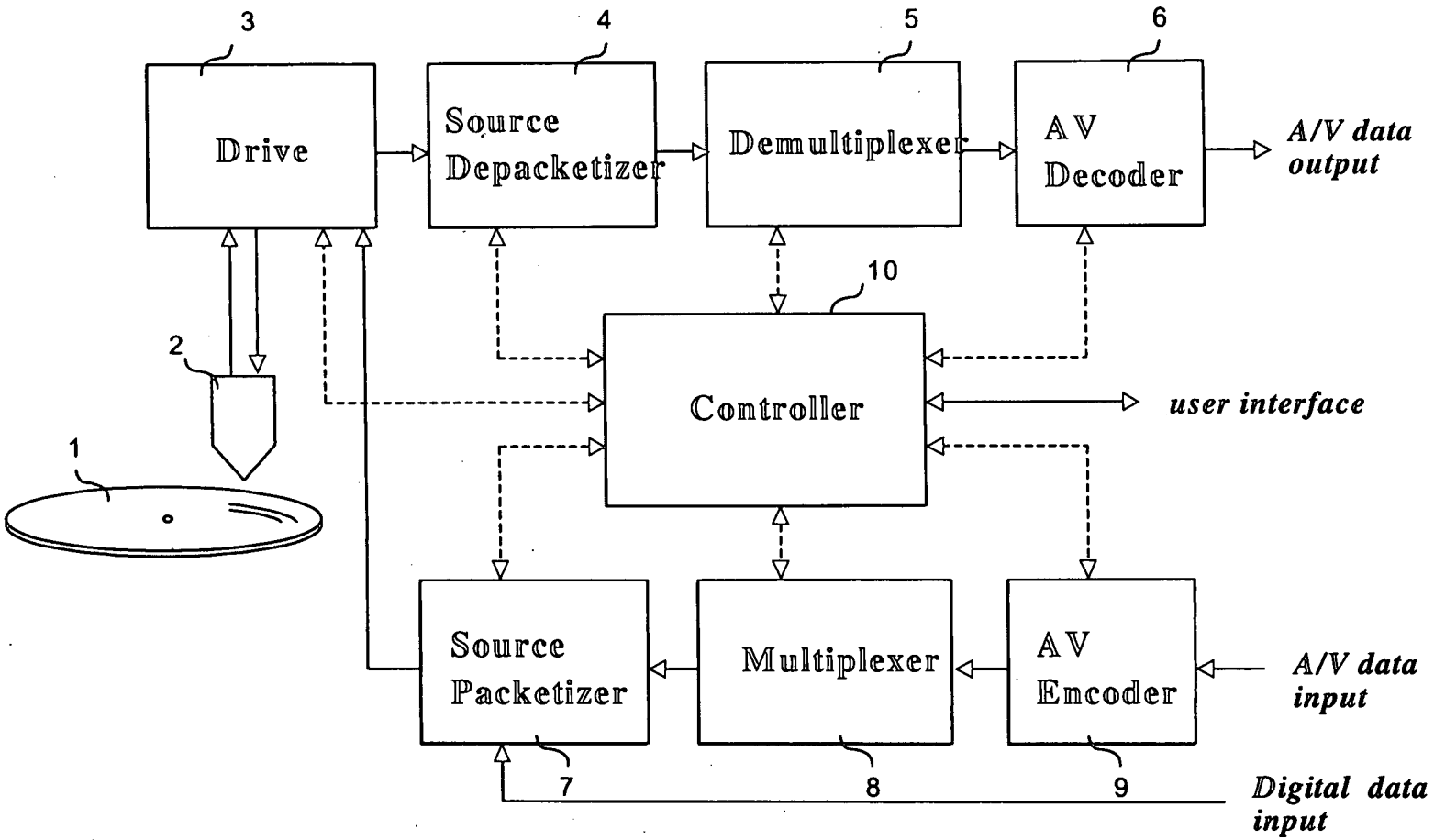

3
4
5
6
Drive
Source Depacketizer
Demultiplexer
AV Decoder
A/V data output
10
2
Controller
user interface
1
Source Packetizer
Multiplexer
AV Encoder
A/V data input
7
8
9
Digital data input

FIG. 4

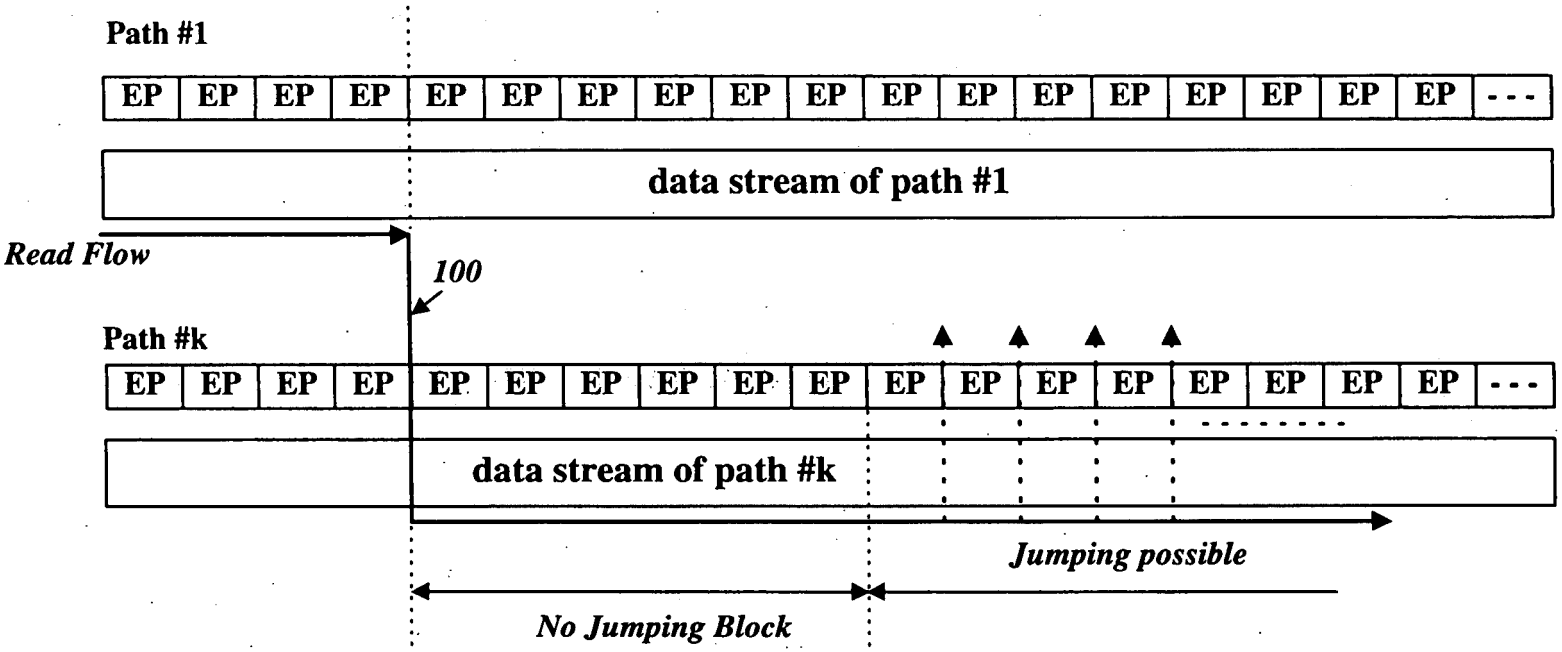

Path #1
EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP - - -
data stream of path #1
Read Flow
100
Path #k
EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP EP - - -
data stream of path #k
Jumping possible
No Jumping Block

FIG. 5

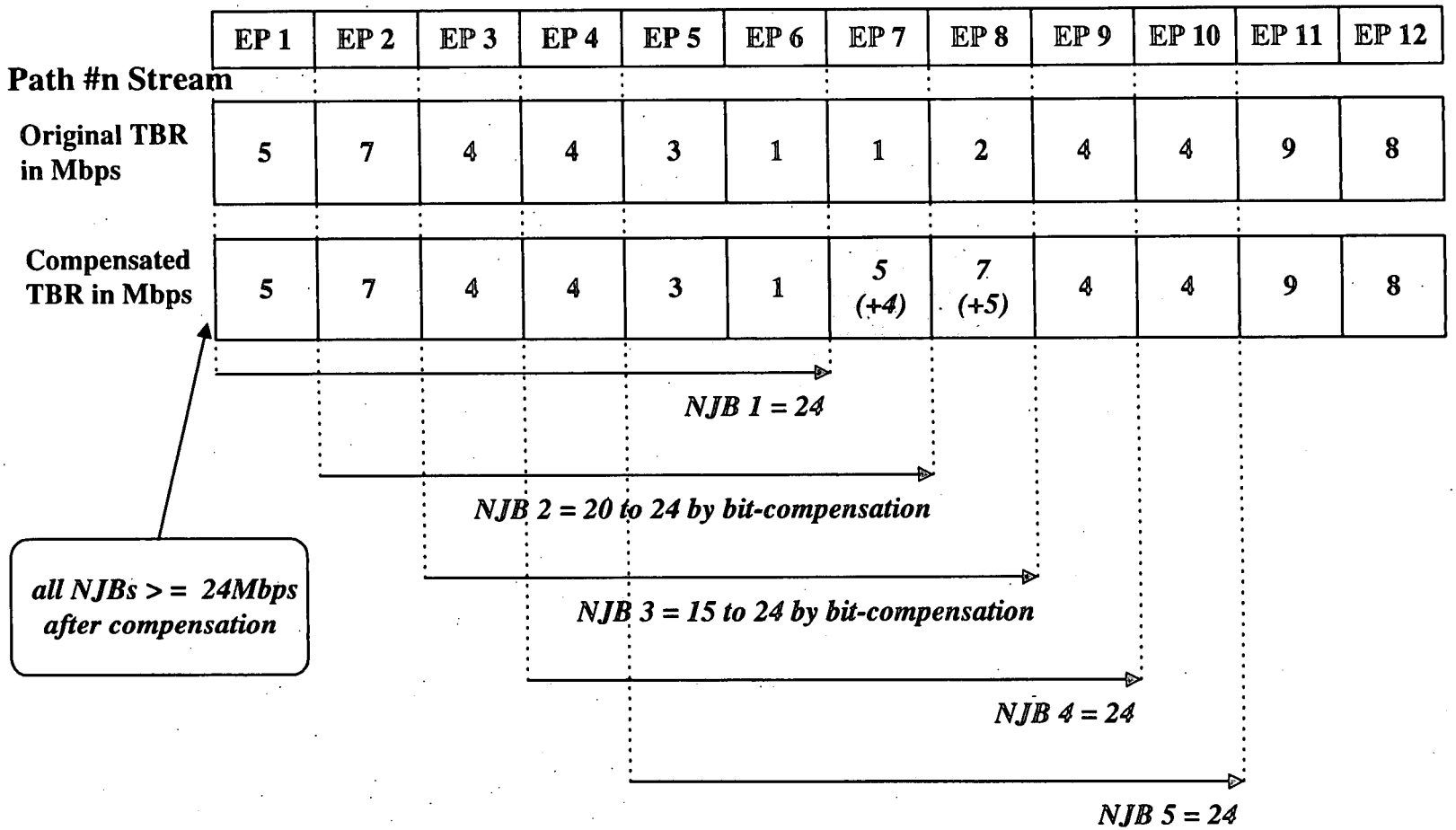

EP 1
EP 2
EP 3
EP 4
EP 5
EP 6
EP 7
EP 8
EP 9
EP 10
EP 11
EP 12
Path #n Stream
Original TBR in Mbps
5
7
4
4
3
1
1
2
4
4
9
8
Compensated TBR in Mbps
5
7
4
4
3
1
5 (+4)
7 (+5)
4
4
9
8
NJB 1 = 24
NJB 2 = 20 to 24 by bit-compensation
NJB 3 = 15 to 24 by bit-compensation
NJB 4 = 24
NJB 5 = 24
all NJBs >= 24Mbps after compensation

FIG. 6

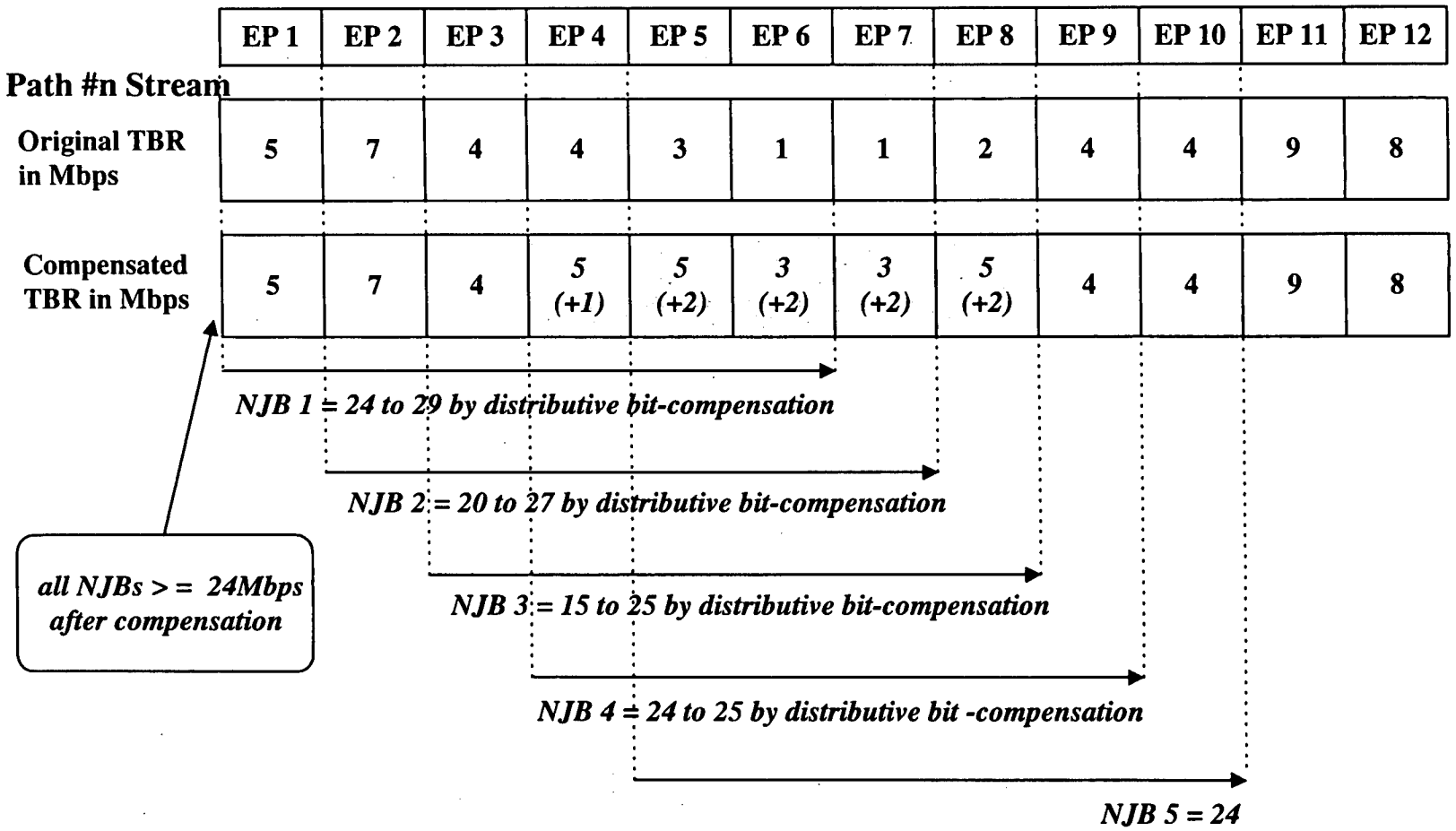
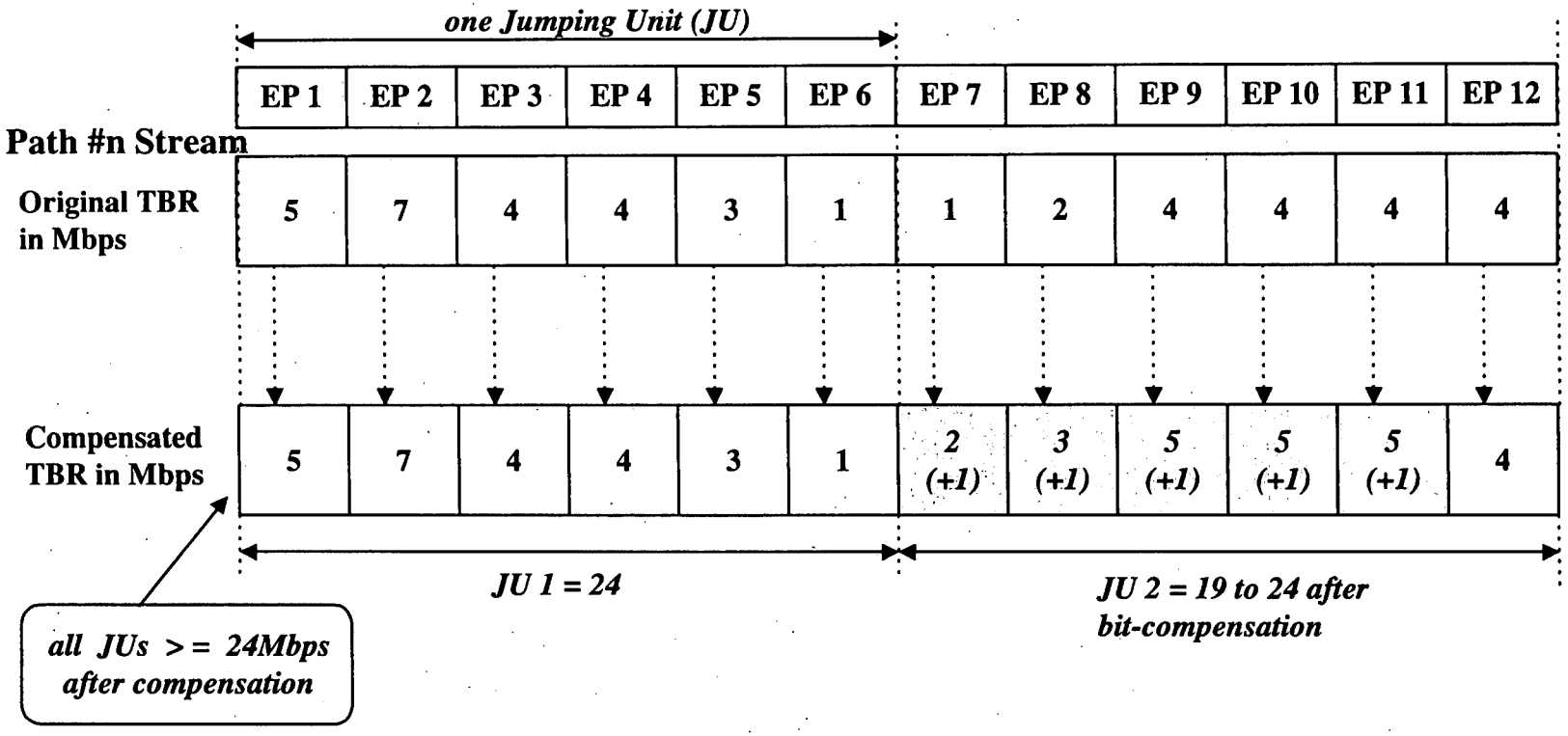

EP 1
EP 2
EP 3
EP 4
EP 5
EP 6
EP 7
EP 8
EP 9
EP 10
EP 11
EP 12
Path #n Stream
Original TBR in Mbps
5
7
4
4
3
1
1
2
4
4
9
8
Compensated TBR in Mbps
5
7
4
5 (+1)
5 (+2)
3 (+2)
3 (+2)
5 (+2)
4
4
9
8
NJB 1 = 24 to 29 by distributive bit-compensation
NJB 2 = 20 to 27 by distributive bit-compensation
NJB 3 = 15 to 25 by distributive bit-compensation
NJB 4 = 24 to 25 by distributive bit -compensation
NJB 5 = 24
all NJBs > = 24Mbps after compensation

FIG. 7


one Jumping Unit (JU)
EP 1
EP 2
EP 3
EP 4
EP 5
EP 6
EP 7
EP 8
EP 9
EP 10
EP 11
EP 12
Path #n Stream
Original TBR in Mbps
5
7
4
4
3
1
1
2
4
4
4
4
Compensated TBR in Mbps
5
7
4
4
3
1
2 (+1)
3 (+1)
5 (+1)
5 (+1)
5 (+1)
4
JU 1 = 24
JU 2 = 19 to 24 after bit-compensation
all JUs >= 24Mbps after compensation